

CLAIMS

What is claimed is:

- 5 1. A data communications device, comprising:
- a supervisory circuit;
 - a power supply; and
 - a power circuit coupled to the supervisory circuit and the power supply,
- the power circuit including:
- 10 a data communications port,
 - a power supply connection coupled to the power supply,
 - and
 - a power controller coupled to the data communications port
- and the power supply connection, the power controller being
- 15 configured to:
- provide a power signal from the
 - power supply connection to the data
 - communications port in response to
 - communication with the supervisory circuit,
 - 20 lose communication with the
 - supervisory circuit for a period of time, and
 - after losing communication with the
 - supervisory circuit for the period of time,
 - selectively (i) continue to provide the power
 - 25 signal from the power supply connection to
 - the data communications port when a local
 - parameter has a first value, and (ii)
 - discontinue providing the power signal from

the power supply connection to the data communications port when the local parameter has a second value.

- 5 2. The data communications device of claim 1 wherein the supervisory circuit provides a broadcast message to a global address in order to communicate with the power circuit, and wherein the power controller of the power circuit, when providing the power signal from the power supply connection to the data communications port, is configured to:
- 10 supply the power signal from the power supply connection to the data communications port in response to the broadcast message to the global address.
3. The data communications device of claim 1 wherein the power controller of the power circuit, when providing the power signal from the power supply connection
- 15 to the data communications port, is configured to:
- start a counter in response to communication with the supervisory circuit and supply the power signal from the power supply connection to the data communications port until the counter expires.
- 20 4. The data communications device of claim 3 wherein the power controller of the power circuit, when losing communication for the period of time, is configured to:
- detect expiration of the counter.

5. The data communications device of claim 1 wherein the supervisory circuit provides a series of periodic broadcast messages to a global address in order to communicate with the power circuit, and wherein the power controller of the power circuit, when providing the power signal from the power supply connection to the data communications port, is configured to:

restart a counter in response to each of the series of periodic broadcast messages to the global address and supply the power signal from the power supply connection to the data communications port until the counter expires.

6. The data communications device of claim 5 wherein the power controller of the power circuit is further configured to:

restart the counter in response to a message from the supervisory circuit which uniquely addresses the power circuit.

7. In a circuit, a method for powering a data communications port of the circuit, the method comprising the steps of:

providing a power signal to the data communications port in response to communication with an external component;

losing communication with the external component for a period of time;

and

after losing communication with the external component for the period of time, selectively (i) continuing to provide the power signal to the data communications port when a local parameter has a first value, and (ii) discontinuing the power signal when the local parameter has a second value.

8. The method of claim 7 wherein the external component provides a broadcast message to a global address in order to communicate with the circuit, and wherein the step of providing the power signal includes the step of:
- 5 supplying the power signal to the data communications port in response to the broadcast message to the global address.
9. The method of claim 7 wherein the step of providing the power signal includes the step of:
- 10 starting a counter in response to communication with the external component and supplying the power signal to the data communications port until the counter expires.
10. The method of claim 9 wherein the step of losing communication for the period of time includes the step of:
- 15 detecting expiration of the counter.
11. The method of claim 7 wherein the external component provides a series of periodic broadcast messages to a global address in order to communicate with the circuit, and wherein the step of providing the power signal includes the step of:
- 20 restarting a counter in response to each of the series of periodic broadcast messages to the global address and supplying the power signal to the data communications port until the counter expires.
12. The method of claim 11, further comprising the step of:
- 25 restarting the counter in response to a message from the external component which uniquely addresses the circuit.

13. A circuit, comprising:

a data communications port;

a power supply connection; and

a controller coupled to the data communications port and the power supply

5 connection, the controller being configured to:

provide a power signal from the power supply connection
to the data communications port in response to communication
with an external component;

10 lose communication with the external component for a
period of time; and

after losing communication with the external component
for the period of time, selectively (i) continue to provide the power
signal from the power supply connection to the data
communications port when a local parameter has a first value, and
15 (ii) discontinue providing the power signal from the power supply
connection to the data communications port when the local
parameter has a second value.

14. The circuit of claim 13 wherein the external component provides a broadcast
20 message to a global address in order to communicate with the circuit, and wherein
the controller, when providing the power signal from the power supply connection
to the data communications port, is configured to:

supply the power signal from the power supply connection to the data
communications port in response to the broadcast message to the global address.

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15. The circuit of claim 13 wherein the controller, when providing the power signal from the power supply connection to the data communications port, is configured to:
- 5 start a counter in response to communication with the external component and supply the power signal from the power supply connection to the data communications port until the counter expires.
16. The circuit of claim 15 wherein the controller, when losing communication for the period of time, is configured to:
- 10 detect expiration of the counter.
17. The circuit of claim 13 wherein the external component provides a series of periodic broadcast messages to a global address in order to communicate with the circuit, and wherein the controller, when providing the power signal from the power supply connection to the data communications port, is configured to:
- 15 restart a counter in response to each of the series of periodic broadcast messages to the global address and supply the power signal from the power supply connection to the data communications port until the counter expires.
- 20 18. The circuit of claim 17 wherein the controller is further configured to:
- restart the counter in response to a message from the external component which uniquely addresses the circuit.

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19. A computer program product that includes a computer readable medium having instructions stored thereon for powering a data communications port, such that the instructions, when carried out by a computerized circuit, cause the computerized circuit to perform the steps of:

5 providing a power signal to the data communications port in response to communication with an external component;

 losing communication with the external component for a period of time;
and

 after losing communication with the external component for the period of
10 time, selectively (i) continuing to provide the power signal to the data communications port when a local parameter has a first value, and (ii) discontinuing the power signal when the local parameter has a second value.

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20. A circuit, comprising:

a data communications port;

a power supply connection; and

a controller coupled to the data communications port and the power supply

5 connection, the controller being configured to:

provide a power signal from the power supply connection

to the data communications port in response to communication

with an external component, and lose communication with the

external component for a period of time, wherein the controller

10 includes means for, after losing communication with the external

component for the period of time, selectively (i) continuing to

provide the power signal from the power supply connection to the

data communications port when a local parameter has a first value,

and (ii) discontinuing the power signal from the power supply

15 connection to the data communications port when the local

parameter has a second value.

21. A supervisory circuit board, comprising:

an interface; and

20 a control circuit coupled to the interface, the control circuit being

configured to provide a series of broadcast messages to a global address through

the interface in order to maintain communication with multiple power circuits.

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